

REMARKS

This Amendment, submitted in response to the Office Action dated March 23, 2005, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-22 are now all the claims pending in the application.

I. Preliminary Matter

Applicant respectfully requests that the Examiner approve the drawings filed January 31, 2001.

II. Claim Rejections under 35 U.S.C. § 103

Claims 1-20 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Stavely et al. (U.S. Patent No. 5,969,372) in view of Yajima et al. (U.S. Patent No. 4,074,231).

Claim 1

Stavely is directed to a film scanner for correcting dust and scratches by using dark-field illumination. See Title. Stavely discloses scanning an entire image using white light followed by scanning an image using infrared light or vice versa. See col. 5, lines 5-10. A preferred embodiment of Stavely discloses switching between white light and infrared light on a scan-line by scan-line basis to avoid mechanical position inconsistency, sophisticated algorithms and additional memory associated with performing two separate full-image scans. See col. 5, lines 13-16. For each scan line, image processing is used on a pixel by pixel basis to remove image areas from the white light scan corresponding to low intensity areas in the infrared scan. Image

processing software is then used to fill in the resulting blank areas in the white scan with colors corresponding to surrounding areas. See col. 5, lines 45-50.

Image processing techniques including area size thresholding, feature clustering, edge detection and boundary following, and region extraction methods may be used to limit image correction to larger features and to ignore small scattered points of low intensity and noise in the infrared scan. See col. 5, lines 60-65. In detecting a surface artifact, a point on a film is illuminated along a first optical path and the intensity is measured. Then the intensity of the light passing through the point along a second optical path is measured. If the intensity of the light along the second optical path is greater than a threshold value, the point is identified as an artifact. See col. 10, lines 22-40; Fig. 9.

Claim 1 recites “performing preprocessing for the *blemish elimination processing* on said defective image *while reading photoelectrically said image*.” The Examiner asserts that this aspect of the claim is disclosed by Stavely col. 5, lines 60-65. The respective column and lines cited by the Examiner disclose that known *image processing* techniques such as area size thresholding, feature clustering, edge detection and boundary following, and region extraction methods may be used to limit image correction to larger feature. However, such processes are directed to *image processing* and are not directed to *blemish elimination processing* for eliminating a blemish on an image.

Assuming *arguendo*, the image processing of Stavely discloses the claimed blemish elimination processing, the image processing of Stavely is not performed on the defective image. In Stavely, the image processing is performed on the actual image where blank areas are filled with colors corresponding to surrounding areas. As discussed in col. 2, lines 26-35, an image

processing software is used to alter areas in the first scan, and the first scan corresponds to an image to be corrected and not the defective image.

Claim 1 further recites “performing the blemish elimination processing on a *blemish of said actual image, based on* the defective image subjected to said preprocessing.” The Examiner cites Stavely col. 4, lines 19-24 for teaching this aspect of the claim. The respective column and lines cited by the Examiner discloses “scan A is the normal image scan performed using direct (bright-field) white light, producing the image to be corrected. Scan B provides a defect signature (an image of the surface defects), which is then used by *image processing* software to suitably alter corresponding areas in the first scan.”

However, as indicated above, the Examiner cites the image processing of Stavely for disclosing the claimed “performing preprocessing for the blemish elimination processing on said defective image while reading photoelectrically said image.” Therefore, the Examiner cannot cite the image processing of Stavely for also disclosing “performing the blemish elimination processing on a blemish of said actual image, based on the defective image subjected to said preprocessing,” which is a separate and distinct limitation.

Claim 1 further recites “wherein said preprocessing comprises edge enhancement processing.” The Examiner concedes that this aspect of the claim is not disclosed in Stavely and cites Yajima, col. 2, lines 41-48, to cure the deficiency.

Yajima is directed to a system which recognizes patterns such as printed characters and hand-written characters. See col. 1, lines 5-10. The respective column and lines cited by the Examiner disclose enhancing an edge of a line without being influenced by noises, such as smear and strain, on ground paper with characters depicted thereon and which produces a pattern of

good quality from a blurred pattern ascribable to the shades of the characters and the contrast thereof to the background. However, Applicant submits that it is unlikely that one of skill in the art would combine aspects of a system for recognizing patterns with the film scanner of Stavely, which is from a different field of endeavor.

Assuming the combination of Yajima with Stavely is obvious, the line edge enhancement performed is Yajima is performed on an input signal S and not on a defective image for blemish elimination processing. In establishing obviousness, the Examiner must look at the references as a whole as to what they would convey to one of skill in the art and the Examiner cannot merely pick and choose elements of the prior art to teach the claimed elements.

For at least the above reasons, claim 1 and its dependent claims should be deemed allowable. Since claim 7 recites similar elements, claim 7 and its dependent claims should be deemed allowable for at least the same reasons.

Claims 1, 5, 8, 4 and 10

Applicant also submits that the same aspect of Stavely, col. 4, lines 21-24, was cited for teaching “performing the blemish elimination processing on a blemish of said actual image, based on the defective image subjected to said preprocessing” as recited in claim 1, the evaluated result of claims 4 and 10, and the flag information of claims 5 and 8. Since the Examiner is citing the same aspect of the reference for teaching multiple aspects of the claims, Applicant requests that the Examiner cite other aspects of the prior art, or cite new prior art for teaching the separate and distinct claim elements.

III. New Claims

Applicant has added claims 21 and 22 to provide a more varied scope of protection. Claims 21 and 22 should be deemed allowable by virtue of their dependency to claim 1 for at least the reasons set forth above.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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